

**IV**  
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U.S.P.T.O. AUTHORITY OMDR AFM LOPAF B 04  
MAY BE CONSIDERED DECLASSIFIED WHEN  
CLASSIFICATION IS REMOVED FROM THE  
DISCLOSURE OF THIS APPLICATION AS  
FILED



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address : COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
924,406	07/11/78	Hyman Kirtchik	11890

HQ USAF/AFJACP  
1900 Half Street, S. W.  
Washington, D. C. 20324

MAILING

**EXAMINER**

R. D. Lovering

ART UNIT	PAPER NUMBER
223	4

OCT 30 1979

DATE MAILED:

COMMISSIONER OF PATENTS AND TRADEMARKS GROUP 223

This document consists of 2 pages  
No. 1 of 3 Copies

This application has been examined.  Responsive to communication filed on JULY 28, 1978  This action is made final.

A shortened statutory period for response to this action is set to expire 6 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

1. <input checked="" type="checkbox"/> Notice of References Cited, Form PTO-892.	2. <input type="checkbox"/> Notice of Informal Patent Drawing, PTO-948.
3. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152.	4. <input type="checkbox"/>

**Part II SUMMARY OF ACTION**

1.  Claims 1-4 are pending in the application.
2.  Claims \_\_\_\_\_ have been cancelled.
3.  Claims \_\_\_\_\_ are allowed.
4.  Claims 1-4 are rejected.
5.  Claims \_\_\_\_\_ are objected to.
6.  Claims \_\_\_\_\_ are subject to restriction or election requirement.
7.  The formal drawings filed on \_\_\_\_\_ are acceptable.
8.  The drawing correction request filed on \_\_\_\_\_ has been  approved.  disapproved.
9.  Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has  been received.  not been received.  been filed in parent application, serial no. \_\_\_\_\_, filed on \_\_\_\_\_.

10.  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

11.  Other

NATIONAL SECURITY INFORMATION  
Unauthorized disclosure subject  
to Criminal Sanctions

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## PART III

SERIAL NUMBER 924,406

GROUP ART UNIT 223

NOTIFICATION OF REJECTION(S) AND/OR OBJECTI~~ON~~<sup>ATION</sup>(S) (35 USC 132)

	CLAIMS (1)	REASONS FOR REJECTION (2)	REFERENCES * (3)	INFORMATION IDENTIFICATION AND COMMENTS (4)
1	1-4 35 U.S.C. 103	35 U.S.C. A v B		OBVIOUS TO IMPROVE EMBODIMENT OF A IN WHICH ALUMINUM OXIDE IS USED IN MAKING DIFFUSION BARRIER (COL. 5, LINE 59 - COL. 6, LINE 25) AND GERMANIUM OXIDE CON- (CONTINUED IN PARAGRAPH 5 BELOW)
2				
3				
4				
5				TAINING GLASS IS USED IN MAKING RECEIVER LAYER (COL. 6, LAST PARAGRAPH) BY INTERPOSING SILVER LAYER OF B BETWEEN DIFFUSION BARRIER AND RECEIVER LAYER TO IMPROVE INFRARED PROPERTIES. IN ABOVE EMBODIMENT, ORIGINALLY-USSED ALUMINUM OXIDE WOULD APPEAR TO PRODUCE NICKEL ALUMINIDE IN SITU.
X6				APPLICANT IS REQUIRED TO INSERT PATENT NUMBERS ON PAGES 5 AND 12 OF SPECIFICATION.
X7				C, D, E, F, G AND H ARE CITED FURTHER TO SHOW STATE OF THE ART.

\* Capital letters representing references are identified on accompanying Form PTO-892

The symbol "v" between letters represents - in view of -

The symbol "+" or "&" between letters represents - and -

A slash "/" between letters represents the alternative - or -

NOTE: Sections 100, 101, 102, 103, and 112 of the Patent Statute (Title 35 of the United States Code) are reproduced on the back of this sheet.

EXAMINER

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Richard D. Lovering  
RICHARD D. LOVERING

EXAMINER  
GROUP ART UNIT 223

DECLASSIFIED  
BY ORIGINATING AGENCY  
SECRET

*35 U.S.C. 100. Definitions.* When used in this title unless the context otherwise indicates —

- (a) The term "invention" means invention or discovery.
- (b) The term "process" means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.
- (c) The terms "United States" and "this country" mean the United States of America, its territories and possessions.
- (d) The word "patentee" includes not only the patentee to whom the patent was issued but also the successors in title to the patentee.

*35 U.S.C. 101. Inventions patentable.* Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

*35 U.S.C. 102. Conditions for patentability; novelty and loss of right to patent.* A person shall be entitled to a patent unless —

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or
- (c) he has abandoned the invention, or
- (d) the invention was first patented or cause to be patented by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application filed more than twelve months before the filing of the application in the United States, or
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or
- (f) he did not himself invent the subject matter sought to be patented, or
- (g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

*35 U.S.C. 103. Conditions for patentability; non-obvious subject matter.* A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

*35 U.S.C. 112. Specification.* The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention. A claim may be written in independent or dependent form, and if in dependent form, it shall be construed to include all the limitations of the claim incorporated by reference into the dependent claim.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.